Bidding Fox

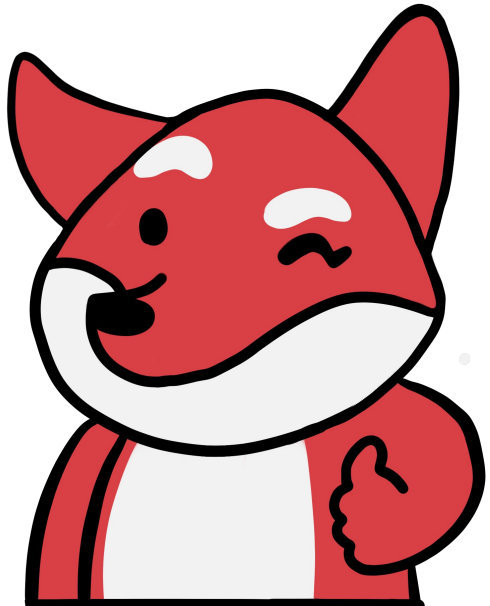
Elasticsearch for dummies

Jakub Kluvánek
jakub.kluvanek@biddingfox.com
@kluvi, @biddingfox_devs

WTF

~~database~~

RESTful search and analytics engine



APIs

- Index API
- Get API
- Delete API
- Delete by query API
- Update API
- Bulk API
- Reindex API
- Multi termvectors API
- ...

~~rows~~

documents

Parts

- cluster
- node
- index
- mapping
- shard
- segment
- document
- field
- subfield

denormalize everything

~~realtime~~

NRT

https://www.elastic.co/guide/en/elasticsearch/reference/current/_basic_concepts.html#_near_realtime_nrt

Data loss

- index-time (queues)
- failed shard
- duplicity

index allocation

https://www.elastic.co/guide/en/elasticsearch/reference/current/shard-allocation-filtering.html

Mapping

- text, keyword
- long, integer, short, byte, double, float, half_float, scaled_float
- date
- boolean

Mapping

- binary
- integer_range, float_range,...
- object, array, nested
- geo_point, geo_shape
- ...

https://www.elastic.co/guide/en/elasticsearch/reference/current/mapping-types.html

Mapping update

- multi-index
- reindex
- update

Search API

- query/filter
- match
- bool
- term
- range
- exists
- ids

https://www.elastic.co/guide/en/elasticsearch/reference/current/query-dsl.html

Aggregations

- metrics (sum, max, min, stats,...)
- buckets (terms, histogram, range,...)
- pipeline (max bucket, stats bucket,...)

https://www.elastic.co/guide/en/elasticsearch/reference/current/search-aggregations.html

Aggregations

- nesting
- partitioning

Update API

- update vs index API
- painless
- stored scripts

https://www.elastic.co/guide/en/elasticsearch/reference/current/docs-update.html

Bulk API

- multi-index
- multi-operation
- MUST-HAVE!

https://www.elastic.co/guide/en/elasticsearch/reference/current/docs-bulk.html

document versioning

scrolling

routing

scalability

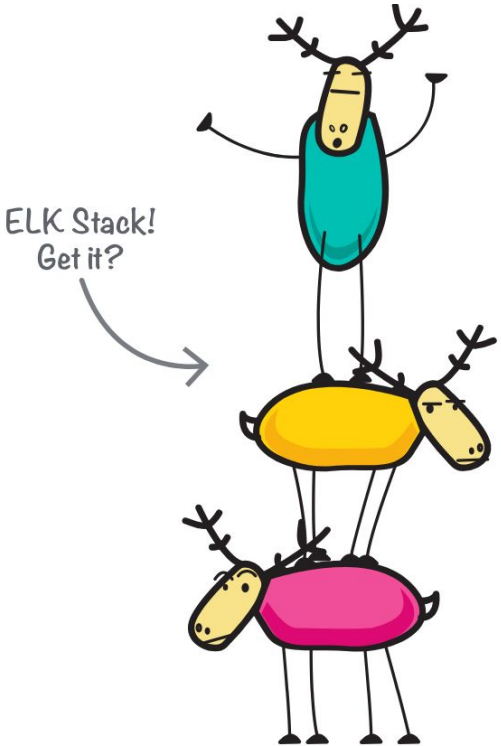
authorization

backups

GUIs

- Kibana
- Cerebro

ELK stack

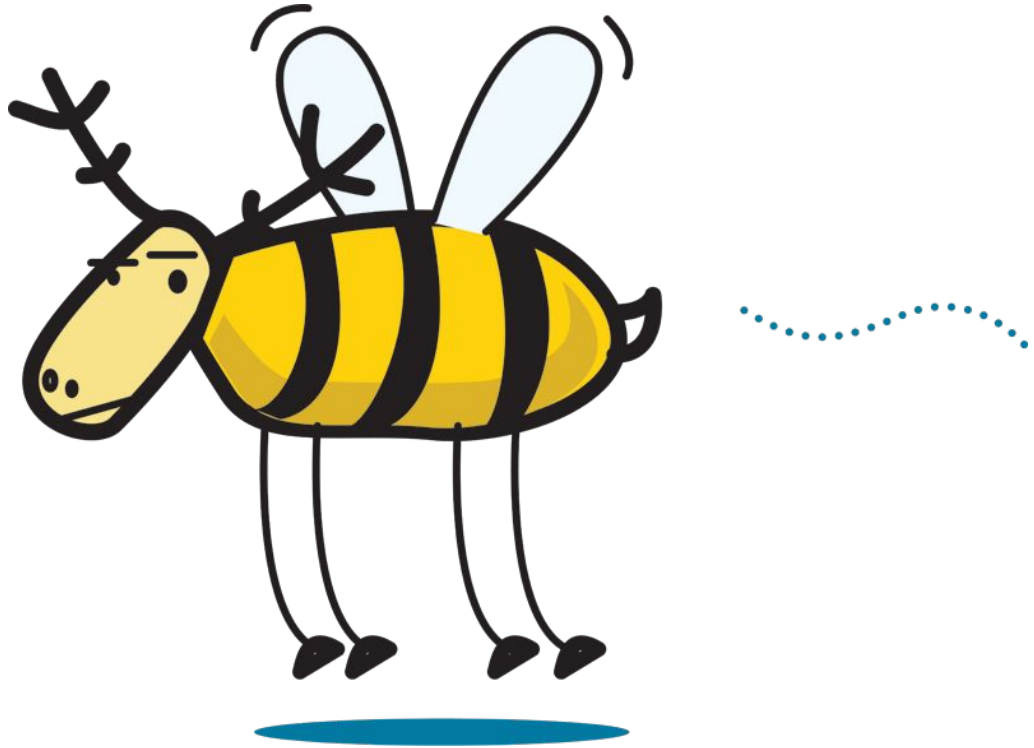


E Elasticsearch

L Logstash

K Kibana

ELKB (Elastic) stack



školení ?

Otázky?

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